



MATHEMATICS FOR MATRICULATION

ALGEBRA

2ND EDITION

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MATHEMATICS FOR MATRICULATION: ALGEBRA

SECOND EDITION

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**Mathematics for
Matriculation:
Algebra, Second Edition**
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FOREWORD

CENTRE FOR FOUNDATION STUDIES



MESSAGE FROM THE DEAN, CENTRE FOR FOUNDATION STUDIES

Assalamualaikum Warahmatullahi Wabarakatuh.

I am honoured to write the foreword for this book: *Mathematics for Matriculation: Algebra, 2nd edition*.

I wish to congratulate the authors, the team of academics from Centre for Foundation Studies of the IIUM for their continuous effort to improve and enhance the first edition of the book. I am sure your generous contributions indirectly provide pathways towards improving the quality of the teaching and learning at the Centre for Foundation Studies.

As an academic institution, the management of IIUM continuously supports and acknowledges efforts by the academic staff towards the advancement of knowledge as well as excellence in teaching. The efforts to publish the adaptation series of widely used textbooks will definitely enhance the quality of reading materials for students and complement the work of the course instructors or lecturers.

Lastly, I would like to encourage students to make the most of this book. Hopefully, this book will also benefit other students taking similar mathematics courses such as those in the preparatory or foundation programmes.

Thank you.

Best wishes.

ASSOC. PROF. DATO' DR. SYED ZAHIR IDID

DEAN



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Garden of Knowledge and Virtue

Preface

Mathematics for Matriculation: Algebra is written for students at pre-university level. The book aims to provide a comprehensive study of basic concepts and principles of algebra as required by the local matriculation syllabus.

The wealth of suggestions that we gained from users; our colleagues and students, coupled with our experience in the classroom have made us embark upon this 2nd edition project. Every relentless effort has been made to ensure that the book is readable and easily understood.

Some of the salient and distinctive features of the book include the use of illustrations to clarify the meaning of the definitions and mathematical theorems, properties and results, with step by step explanations of worked examples and an extensive collection of questions including applied problems at the end of each chapter to help students relate their learning to real life situations.

The 2nd edition also contains several enrichments which include boxed guidelines in the text to help students tackle problems by using a step-by-step approach, addition of worked examples, a comprehensive summary at the end of each chapter and samples of cloned-examination questions. Apart from that, answers of selected questions in the exercises are provided at the end of the textbook.

It is our earnest hope that this book will motivate students to develop a deeper appreciation and interest in mathematics besides building a strong foundation in the principles of algebra.

Last but not least, we thank the academics and students at the Department of Sciences Programmes, Center for Foundation Studies, International Islamic University Malaysia (IIUM) for their continuous support.

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Contents

<i>Foreword</i>	iii
<i>Preface</i>	iv
<i>About the Authors</i>	v
CHAPTER 1 FUNDAMENTAL CONCEPTS OF ALGEBRA	1
1.1 Real Number System	2
1.2 Exponents and Radicals	13
1.3 Algebraic Expressions	22
1.4 Rational Expressions	31
CHAPTER 2 EQUATIONS AND INEQUALITIES	43
2.1 Equations	44
2.2 Modeling with Equations	60
2.3 Inequalities	67
CHAPTER 3 COORDINATE GEOMETRY	81
3.1 Rectangular Coordinate Systems	82
3.2 Graphs of Equations	86
3.3 Lines	90
3.4 Circle	99
CHAPTER 4 COMPLEX NUMBERS	105
4.1 Introduction to Complex Number	106
4.2 Operations on Complex Number	108
4.3 Argand Diagram: Graphical Representation	112
CHAPTER 5 FUNCTIONS AND GRAPHS	117
5.1 Functions	118
5.2 Properties of Functions	125
5.3 Graphs of Functions	129
5.4 Graphic Techniques: Transformations	133
5.5 Quadratic Functions	140
5.6 Operations on Functions: Composite Functions	148
5.7 One-to-one Functions: Inverse Functions	154
CHAPTER 6 POLYNOMIAL FUNCTIONS	167
6.1 Polynomials	168
6.2 Division of Polynomials	169
6.3 Remainder and Factor Theorems	174
6.4 Real Zeros of Polynomials	177
6.5 Complex Zeros of Polynomials	182
6.6 Graphing Polynomial Functions	186
CHAPTER 7 RATIONAL FUNCTIONS	197
7.1 Rational Functions	198
7.2 Asymptotes of Rational Functions	200
7.3 Graphing Rational Functions	205

CHAPTER 8	EXPONENTIAL AND LOGARITHMIC FUNCTIONS	217
8.1	Exponential Functions	218
8.2	Logarithmic Functions	223
8.3	Exponential and Logarithmic Equations.....	235
8.4	Modeling with Exponential and Logarithmic Functions	241
CHAPTER 9	SYSTEMS OF EQUATIONS	247
9.1	Matrices.....	248
9.2	Determinants	256
9.3	System of Equations: Substitution and Elimination Method.....	264
9.4	System of Equations: Matrices	272
9.5	System of Equations: Determinant	278
9.6	System of Equations: Inverse	281
CLONED EXAMINATION QUESTIONS		293
ANSWERS TO SELECTED EXERCISES		A1–A24